

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim1 (original): A cemented carbide material for a surface coated gear cutting tool which is employed in a substrate for a surface coated gear cutting tool obtained by forming a hard coated layer on a surface of said substrate,

said cemented carbide material for a surface coated gear cutting tool comprising a WC- β t-Co based cemented carbide,

wherein a content of Co forming a binder phase of said cemented carbide material for a surface coated gear cutting tool is in a range of 12 to 17 wt%, and

among components of a β t solid solution forming a hard phase of said cemented carbide material for a surface coated gear cutting tool, a content of components excluding WC is in a range of 15 to 20 wt%, and a total content of Ta carbonitride and Nb carbonitride is in a range of 5 to 8 wt%.

Claim 2 (original): A cemented carbide material for a surface coated gear cutting tool according to claim 1, wherein a Nb content D_{Nb} and a Ta content D_{Ta} in said β t solid solution satisfy a relational expression of $D_{Nb}/(D_{Nb}+D_{Ta}) \geq 0.7$.

Claim 3 (original): A cemented carbide material for a surface coated gear cutting tool according to claim 1, wherein a fracture toughness at room temperature is in a range of 9.5 to 13 MPa(m)^{1/2}.

Claim 4 (original): A surface coated gear cutting tool comprising a cemented carbide material for surface coated gear cutting tools according to claim 1.

Claim 5 (new): A cemented carbide material, comprising:

a WC- β t-Co based cemented carbide,

wherein a content of Co forming a binder phase of said cemented carbide material is in a range of 12 to 17 wt%, and

among components of a β t solid solution forming a hard phase of said cemented carbide material, a content of components excluding WC is in a range of 15 to 20 wt%, and a total content of Ta carbonitride and Nb carbonitride is in a range of 5 to 8 wt%.

Claim 6 (new): A cemented carbide material according to claim 5, wherein a Nb content D_{Nb} and a Ta content D_{Ta} in said β t solid solution satisfy a relational expression of $D_{Nb}/(D_{Nb}+D_{Ta}) \geq 0.7$.

Claim 7 (new): A cemented carbide material according to claim 5, wherein a fracture toughness at room temperature is in a range of 9.5 to 13 MPa(m)^{1/2}.

Claim 8 (new): A surface coated gear cutting tool comprising:

a substrate; and

a cemented carbide material according to claim 5 forming a layer over the substrate.